

<b>Aeronautics Educator Guide</b>			
<b>2005 Mathematics</b>			
<b>Content Standards</b>			
<b>Hawaii Mathematics</b>			
<b>Grade 2</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Air Engines (12-16)	HI	MA.2.MA.2.4.2	Identify appropriate units for measuring length, area, capacity, and weight
Air Engines (12-16)	HI	MA.2.MA.2.11.1	Pose questions, collect data, and display the data using a graph (e.g., bar graphs, pictographs)
Rotor Motor (69-75)	HI	MA.2.MA.2.11.1	Pose questions, collect data, and display the data using a graph (e.g., bar graphs, pictographs)
Rotor Motor (69-75)	HI	MA.2.MA.2.12.1	Interpret data displayed in a bar graph and describe how the important features of the data set are represented in a bar graph
Flight: Interdisciplinary Learning Activities (76-79)	HI	MA.2.MA.2.8.1	Use cardinal directions that describe the location of an object or place (i.e., north, south, east, or west) on a coordinate map
Where is North? The Compass Can Tell Us (87-90)	HI	MA.2.MA.2.11.1	Pose questions, collect data, and display the data using a graph (e.g., bar graphs, pictographs)
Plan to Fly There (97-106)	HI	MA.2.MA.2.8.1	Use cardinal directions that describe the location of an object or place (i.e., north, south, east, or west) on a coordinate map
Dunked Napkin ( 17-22)	HI	MA.2.MA.2.11.1	Pose questions, collect data, and display the data using a graph (e.g., bar graphs, pictographs)
Dunked Napkin ( 17-22)	HI	MA.2.MA.2.12.1	Interpret data displayed in a bar graph and describe how the important features of the data set are represented in a bar graph
Paper Bag Mask (23-28)	HI	MA.2.MA.2.4.2	Identify appropriate units for measuring length, area, capacity, and weight
Paper Bag Mask (23-28)	HI	MA.2.MA.2.6.2	Recognize line symmetry in plane figures and create pictures with line symmetry
Paper Bag Mask (23-28)	HI	MA.2.MA.2.11.1	Pose questions, collect data, and display the data using a graph (e.g., bar graphs, pictographs)
Wind in Your Socks) (29-35)	HI	MA.2.MA.2.4.2	Identify appropriate units for measuring length, area, capacity, and weight
Wind in Your Socks) (29-35)	HI	MA.2.MA.2.11.1	Pose questions, collect data, and display the data using a graph (e.g., bar graphs, pictographs)
Bag Balloons (40-43)	HI	MA.2.MA.2.11.1	Pose questions, collect data, and display the data using a graph (e.g., bar graphs, pictographs)
Sled Kite (44-51)	HI	MA.2.MA.2.11.1	Pose questions, collect data, and display the data using a graph (e.g., bar graphs, pictographs)
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<b>2005 Mathematics</b>			
<b>Content Standards</b>			
<b>Hawaii Mathematics</b>			
<b>Grade 3</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Air Engines (12-16)	HI	MA.3.MA.3.4.3	Measure length, capacity, and weight in U.S. customary and metric units (e.g., pound, kilogram)
Air Engines (12-16)	HI	MA.3.MA.3.4.5	Select appropriate tools for measuring length, capacity, and weight
Air Engines (12-16)	HI	MA.3.MA.3.11.1	Pose questions, collect data using surveys, and organize the data into tables and graphs
Rotor Motor (69-75)	HI	MA.3.MA.3.11.1	Pose questions, collect data using surveys, and organize the data into tables and graphs
Flight: Interdisciplinary Learning Activities (76-79)	HI	MA.3.MA.3.4.4	Estimate and determine the elapsed time between two events or times
Where is North? The Compass Can Tell Us (87-90)	HI	MA.3.MA.3.11.1	Pose questions, collect data using surveys, and organize the data into tables and graphs
Plan to Fly There (97-106)	HI	MA.3.MA.3.4.4	Estimate and determine the elapsed time between two events or times
We Can Fly, You and I: Interdisciplinary Learning (107-108)	HI	MA.3.MA.3.4.4	Estimate and determine the elapsed time between two events or times
Dunked Napkin ( 17-22)	HI	MA.3.MA.3.6.1	Predict and confirm the result of flipping, sliding, and turning shapes
Dunked Napkin ( 17-22)	HI	MA.3.MA.3.11.1	Pose questions, collect data using surveys, and organize the data into tables and graphs
Dunked Napkin ( 17-22)	HI	MA.3.MA.3.12.1	Interpret data (e.g., tallies, chart, tables, bar graphs, line plots) and state what the representation shows about the set of data
Dunked Napkin ( 17-22)	HI	MA.3.MA.3.14.1	Make reasonable predictions concerning the likelihood of an event occurring (e.g., certain, likely, unlikely, impossible)
Paper Bag Mask (23-28)	HI	MA.3.MA.3.4.3	Measure length, capacity, and weight in U.S. customary and metric units (e.g., pound, kilogram)
Paper Bag Mask (23-28)	HI	MA.3.MA.3.4.5	Select appropriate tools for measuring length, capacity, and weight
Paper Bag Mask (23-28)	HI	MA.3.MA.3.6.1	Predict and confirm the result of flipping, sliding, and turning shapes
Paper Bag Mask (23-28)	HI	MA.3.MA.3.11.1	Pose questions, collect data using surveys, and organize the data into tables and graphs
Paper Bag Mask (23-28)	HI	MA.3.MA.3.14.1	Make reasonable predictions concerning the likelihood of an event occurring (e.g., certain, likely, unlikely, impossible)
Wind in Your Socks) (29-35)	HI	MA.3.MA.3.4.3	Measure length, capacity, and weight in U.S. customary and metric units (e.g., pound, kilogram)
Wind in Your Socks) (29-35)	HI	MA.3.MA.3.4.5	Select appropriate tools for measuring length, capacity, and weight

Wind in Your Socks) (29-35)	HI	MA.3.MA.3.11.1	Pose questions, collect data using surveys, and organize the data into tables and graphs
Right Flight (52-59)	HI	MA.3.MA.3.14.1	Make reasonable predictions concerning the likelihood of an event occurring (e.g., certain, likely, unlikely, impossible)
Delta Wing Glider (60-68)	HI	MA.3.MA.3.14.1	Make reasonable predictions concerning the likelihood of an event occurring (e.g., certain, likely, unlikely, impossible)
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<b>2005 Mathematics</b>			
<b>Content Standards</b>			
<b>Hawaii Mathematics</b>			
<b>Grade 4</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Air Engines (12-16)	HI	MA.4.MA.4.4.2	Select and apply appropriate customary and metric units and tools to measure length, perimeter, and area for the degree of accuracy needed
Air Engines (12-16)	HI	MA.4.MA.4.11.1	Pose questions, collect data using observations and experiments, and organize the data into tables or graphs
Rotor Motor (69-75)	HI	MA.4.MA.4.11.1	Pose questions, collect data using observations and experiments, and organize the data into tables or graphs
Making Time Fly (80-86)	HI	MA.4.MA.4.11.1	Pose questions, collect data using observations and experiments, and organize the data into tables or graphs
Where is North? The Compass Can Tell Us (87-90)	HI	MA.4.MA.4.11.1	Pose questions, collect data using observations and experiments, and organize the data into tables or graphs
Dunked Napkin ( 17-22)	HI	MA.4.MA.4.11.1	Pose questions, collect data using observations and experiments, and organize the data into tables or graphs
Dunked Napkin ( 17-22)	HI	MA.4.MA.4.13.1	Propose and justify conclusions/predictions based on data
Paper Bag Mask (23-28)	HI	MA.4.MA.4.4.2	Select and apply appropriate customary and metric units and tools to measure length, perimeter, and area for the degree of accuracy needed
Paper Bag Mask (23-28)	HI	MA.4.MA.4.5.4	Predict and confirm the results of putting together and taking apart two- and three-dimensional shapes
Paper Bag Mask (23-28)	HI	MA.4.MA.4.11.1	Pose questions, collect data using observations and experiments, and organize the data into tables or graphs
Paper Bag Mask (23-28)	HI	MA.4.MA.4.13.1	Propose and justify conclusions/predictions based on data
Wind in Your Socks) (29-35)	HI	MA.4.MA.4.4.2	Select and apply appropriate customary and metric units and tools to measure length, perimeter, and area for the degree of accuracy needed

Wind in Your Socks) (29-35)	HI	MA.4.MA.4.11.1	Pose questions, collect data using observations and experiments, and organize the data into tables or graphs
Right Flight (52-59)	HI	MA.4.MA.4.11.1	Pose questions, collect data using observations and experiments, and organize the data into tables or graphs
Right Flight (52-59)	HI	MA.4.MA.4.13.1	Propose and justify conclusions/predictions based on data
Delta Wing Glider (60-68)	HI	MA.4.MA.4.11.1	Pose questions, collect data using observations and experiments, and organize the data into tables or graphs
Delta Wing Glider (60-68)	HI	MA.4.MA.4.13.1	Propose and justify conclusions/predictions based on data